

<u>DB Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
USPT	6038601.pn.	1	<a href="#"><u>L22</u></a>
USPT	11 and ((knowledge or information) near3 management )	28	<a href="#"><u>L21</u></a>
USPT	(professional near4 office)same (Web near4 site)	0	<a href="#"><u>L20</u></a>
USPT	(professional near4 office)same (work near3 (shar\$ or group\$))	4	<a href="#"><u>L19</u></a>
USPT	(professional near4 office)same (work near3 (shar\$ or group))	3	<a href="#"><u>L18</u></a>
USPT	(automatic near5 messag\$)same (relevant or related or relating)same (Web near4 site)	0	<a href="#"><u>L17</u></a>
USPT	(automatic near5 messag\$)same (relevant or related or relating)and (Web near4 site)	8	<a href="#"><u>L16</u></a>
USPT	(automatic near5 messag\$)same (relevant or related or relating)	129	<a href="#"><u>L15</u></a>
USPT	(automatic near5 messag\$)and (calender near5 updat\$)	0	<a href="#"><u>L14</u></a>
USPT	(automatic near5 messag\$)and (memorandum near5 post\$)	0	<a href="#"><u>L13</u></a>
USPT	14 and 19	1	<a href="#"><u>L12</u></a>
USPT	11 and 19	6	<a href="#"><u>L11</u></a>
USPT	11 and 18	0	<a href="#"><u>L10</u></a>
USPT	(work near3 (shar\$ or group))same communicat\$	329	<a href="#"><u>L9</u></a>
USPT	17 and (distribut\$ near8 relevan\$)	86	<a href="#"><u>L8</u></a>
USPT	(information or data) near5 stor\$ near5 retriev\$	21319	<a href="#"><u>L7</u></a>
USPT	(information or data) near5 stor\$ near5 retriev\$ near5 distribut\$ near5 relevan\$	0	<a href="#"><u>L6</u></a>
USPT	interdepartmental near4 communication	0	<a href="#"><u>L5</u></a>
USPT	knowledge near3 management	322	<a href="#"><u>L4</u></a>
USPT	knowledge-management	1	<a href="#"><u>L3</u></a>
USPT	(work near3 (shar\$ or group)) and (web near3 site) and ((notify\$ or email\$) near7 relevant)	3	<a href="#"><u>L2</u></a>
USPT	(work near3 (shar\$ or group)) and (web near3 site)	79	<a href="#"><u>L1</u></a>

**WEST**

Generate Collection

L21: Entry 23 of 28

File: USPT

Nov 3, 1998

DOCUMENT-IDENTIFIER: US 5832497 A

TITLE: Electronic automated information exchange and management system

## BSPR:

There are currently on-line classified advertisement systems which are accessible through the World Wide Web. For example, the San Jose Mercury News places classified advertisements in electronic format on a computer system accessible over the World Wide Web. There have been numerous bulletin board web sites which post job information. These web sites generally post a description of a position and request a response either via an electronic mail address or a postal address. Heretofore, there has not been available a comprehensive system for managing classified advertisements with an effective search engine; a secured resume management facility; accessible resume database; and a targeted resume submission system.

## BSPR:

The invention may be implemented in a computer system whose actions are directed by a computer program configured as a multiple database information exchange management system. The system includes a first database stored in electronically readable memory (resume base) and a second database store in electronically readable memory (job base). The system also includes a communication port suitable for transmitting and receiving data and instructions in the form of electrical signals, to and from remote computers and a database manager for creating and revising records of the first and second databases. The system may also include an iterative database query engine connected to the memory and a process controller connected to the database manager, the iterative data base query engine and the communication port. An accounting system may also be provided. The job base records may contain a plurality of search key fields. The iterative database query engine may include means for searching on a plurality of search key fields of a database for satisfaction of one or more conditions and means for reporting all variables in said search key fields of records which satisfy the search conditions. The search key fields may restrict the possible entries to a predetermined set of entries. The system may also include means for relating a record of the first database to a record of the second database by storing job record identification in a relation field of a resume record. Alternatively, the relation may be accomplished by storing a resume record identification in a relation field of a job record or creating an entry in a relation table, stored in electronically readable memory, wherein the relation entry includes identification of a resume record and a job record.

## CLPR:

1. A computer system whose actions are directed by a computer program configured as a multiple database information exchange management system configured for network operations, comprising:

## ORPL:

Harry, Resume: Resumix Announces Internet Services, Work-Group Computing, pp. 1-3, Jun. 1995.

**WEST**

Generate Collection

L21: Entry 9 of 28

File: USPT

Mar 14, 2000

DOCUMENT-IDENTIFIER: US 6038601 A

TITLE: Method and apparatus for storing and delivering documents on the internet

## BSPR:

When searching for the data initially, this "pull" model provides great utility in locating information. Implicit in the model, however, is that the client machine has the responsibility for finding and downloading data as desired. The user is faced with the problem of having to scour the Web for various information sites that may be of interest to him or her. Although this model provides a user with a large degree of flexibility in terms of the type of information that he or she would like to access each time he or she connects to the Internet, there is clearly a downside to the model in that the user is forced to constantly search for information on the Internet. Given the exponential rate of growth of data on the Internet, this type of searching is becoming increasingly cumbersome.

## DEPR:

According to one embodiment, the presently claimed invention plays a unique role as an intermediary and mediator between end users, namely consumers of information, and content providers, namely producers of information. One embodiment of the present invention provides functionality that gives to the content provider control over their brand, the way in which their information is presented, and the way in which users access their web site. At the same time, users are given the ability to pick and choose the information they want from the sites they want, and presentation of that information is accelerated, thus improving the user's web experience.

## DEPR:

This behavior results in a significant performance improvement. For example, for a TOC with 100 members (e.g. the boilerplate graphics for a web site), a single operation simultaneously validates all 100 members. Without a TOC, the caching server would have to perform 100 network operations to validate one member at a time, and most of the operations are likely to be useless because the content has probably not changed.

## DEPR:

A TOC in its general form is a unit of bulk information management. It describes a set of related Web objects by URL. The system then defines operations on the set such as the bulk validation process described above. Other useful bulk operations can also be defined for TOCs. A TOC can describe a set of objects which are to be retrieved in bulk by the caching server for later off-line viewing. A TOC can also describe a set of objects to be looked ahead on, independently of the lookahead algorithm described later in this document. Sets of web objects which share caching properties can also be grouped into a TOC.

## DEPR:

The first two types of expiration control are described in this section, because they work by sharing information between a back-end server and a caching server. Automatic expiration control is performed entirely by the caching server and is described in section 4.1 Automatic Expiration Control.

## DEPR:

One of the major areas where the caching server adds value is in lookahead (pre-fetch of content). Most caching is based on past usage of the network: the user visits a site and their web browser stores that site's content for a set period of time. If the site is re-visited, the content is fetched locally, rather than over the network.

DEPR:

According to one embodiment, in order to implement a new notification mechanism, the standard driver interface is implemented. A common notification system manager handles all generic tasks, such as subscription validation, driver management, and delivery of information to the caching server.

DEPR:

The following sections describe technology local to the caching server. Algorithms in this section provide intelligent cache management and use of network resources without the need for input from a back-end server. Accordingly, these algorithms cannot provide the fine tuning that is possible with interaction from a back-end server, but do provide some acceleration on any web site, even if that site does not have a back-end server.

**WEST**

Generate Collection

L16: Entry 3 of 8

File: USPT

Jul 3, 2001

DOCUMENT-IDENTIFIER: US 6256664 B1

TITLE: Method and apparatus for computed relevance messaging

## DEPR:

Advisories are digital documents which may contain an explanatory component, describing in terms the consumer can easily understand the reason that the advisory is relevant and the purpose and effects of the action which is being recommended to the consumer. These digital documents may also contain, as another component, executable computer programs, or links to executable computer programs. In this way advisories may provide an automatic solution to any problem which the relevance message may have diagnosed, and which may be activated at the consumer's discretion.

## DEPR:

In a typical implementation, the advice consumer can inform himself of potential impacts of a piece of advice before deciding to apply the recommended solution operator. Some of this may already be done using existing Internet technology. The consumer can query other Web sites and search engines to see if there is any news about a certain advisory.

## DEPR:

In one implementation, the invention extends this mechanism through a special Internet server referred to as the Better Advice Bureau. The Better Advice Bureau serves as a central clearinghouse for information about the effects and side effects of advice. The user can at any time submit to the Better Advice Bureau Web site (described below), recording comments about the specific advisory or the specific site. The Better Advice Bureau can relay those comments to the advice provider, who can respond to them. In one implementation, the Better Advice Bureau protects the identity of the consumer by stripping off identifiers before mailing or posting. The Better Advice Bureau compiles all the information submitted by consumers, and provider responses, into a database available for queries over the network.

## DEPR:

advisories.com is a Web and FTP site operated by the producer of the advice reader software. This allows users from all over the world to obtain information and updates about the system, about the advice reader, and any updates to the software or the invention's communication protocols.

## DEPR:

Better Advice Bureau.org is both a Web site and an advice site on the Internet. It is a site dedicated to the maintenance of the communications protocol as a civilized means of communication.

## DEPR:

The Better Advice Bureau.org Web site describes the principles of system operation, describes why the system is useful, and why it protects individual security and privacy. It describes known risks and recommended procedures for interacting with the system. It serves as a clearing house for user complaints about the operation of advisories, and as a place that consumers may come to for research about the experiences associated with an advisory that they are contemplating to apply.

## DEPR:

It is also a site for the distribution of ratings information, in particular, publication of certain rating conventions, as described above. There are commonly

accepted methods for rating resources on the Web according to criteria provided by a ratings service (see Khare, Rohit, Digital Signature Label Architecture, The World Wide Web Journal, Vol. 2, Number 3, pp. 49-64, Oreilly (Summer 1997) <http://www.w3.org/DSIG>). The Better Advice Bureau, in one implementation, functions as a certifier of the privacy and security and usefulness of individual advisories. In this role, the Better Advice Bureau rates individual advisories by including in them a certain special ratings block, according to a well known ratings format, such as PICS. The Better Advice Bureau also publishes at its Web site the information needed to interpret such ratings blocks, including:

DEPR:

There is no risk of break-in, because there is no interactive shell offering log-in access, as the term break-in implies. However, the server can be flooded with requests as with any Internet server. There are well known techniques to combat such request floods, and professional Web site operators know about them. The server side users of the invention are professionals who are well equipped to evaluate and react to this type of standard threat.

DEPR:

This sort of activity constitutes criminal fraud under current federal regulations. This type of fraud is reportedly rare (see Anonymous (1997) Maximum Security, Sams.net Publishing, Indianapolis. In addition, a perpetrator able to carry off this type of fraud might find systems using the invention to be less attractive than other targets. For example, DNS spoofing of large electronic commerce sites such as bookstores and computer software warehouses is more attractive to the perpetrator, in the sense of offering a more rewarding payoff if the spoof is successful. Indeed, the perpetrator could offer a Web site pretending to be the Web site of a certain merchant, offering up Web pages with the same general visual appearance as Web pages from the correct site. The fake Web site contains forms which the user fills out to execute the transaction. In reality, those forms are used to capture information about credit card numbers or other sensitive financial data. This seems a more direct way for a perpetrator to benefit from a DNS spoofing scheme.

DEPR:

Under AEUP, the information that a certain user is subscribing to a certain advice site is known only to the user and to his advice reader. This requires clarification. In common usage, the word subscription implies a sort of registration process by which a user identifies himself to a provider as a subscriber. Under AEUP, there is no such registration process. There is no need for it. Advice is made freely and anonymously available in the same way that Web sites make Web pages available freely and anonymously. The subscription process is an interaction between the user and the user's own advice reader, not between user and some external advice provider. The advice reader operating on the user's computer obtains from the user the selection of advice sites of interest and stores those on the user's computer only as part of a database maintained locally by the subscription manager component of the advice reader. That database controls the evaluation of advice, causing the advice gatherer to gather advice periodically from some sites and not from others. Subscription is a private matter.

DEPV:

advice before purchase. An advice digest arrives at the consumer computer as part of the shopping process for a new piece of software or hardware on the consumer computer. This collection may arrive by physical transport of media or by electronic transfer, for example, the consumer may obtain the digest from a Web site devoted to shopping. The digest, when processed by the advice reader, evaluates the consumers hardware situation and informs the consumer about its suitability for various possible purchases. The process is typically run only once.

**WEST**

Generate Collection

L21: Entry 12 of 28

File: USPT

Jan 18, 2000

DOCUMENT-IDENTIFIER: US 6016478 A

TITLE: Scheduling system with methods for peer-to-peer scheduling of remote users

## BSPR:

Oftentimes, it is necessary to schedule a group of people for an event, such as a meeting. This is the problem of "group scheduling"--that is, notifying a group of people that a certain event is going to happen and receiving confirmation from members of the group whether each can participate. Conventionally, "group scheduling" has been largely limited to scheduling events for users within a particular "work group." Typically, a "work group" has comprised those users connected together through a local area network (LAN). Alternatively, a "work group" can be extended to users who can receive messages. In this extended group, however, manual processing on the part of the user is typically required. For instance, for a user who connects from a remote location, the user is required to manually process messages received to manually update the calendaring product to update one's scheduling status information. This leads to two disjointed activities for the user: (1) retrieving messages and (2) entering/processing scheduling information.

## BSPR:

With the ever increasing importance of the Internet, work groups are no longer confined to local area networks, or even wide area networks (WANs). Instead, people are connected together via electronic mail or "e-mail." At the same time, however, users have become accustomed to the ease which automatic scheduling systems provide, such as those which operate within a proprietary environment (e.g., Novell Groupwise.RTM. operating on a Netware.RTM. local area network). If users are not connected to the same proprietary system (e.g., Novell Groupwise), then the users must resort to a manual scheduling process. Here, the job typically falls to a secretary or administrative assistant who must contact each proposed participant individually, for determining his or her availability. Typically, the person charges with scheduling the event must "negotiate" with the proposed participants for reaching a time when the meeting can finally happen. The process is still not complete, however. A confirmation message must be sent to all proposed participants for confirming the final time.

## DEPR:

One application software comprises a Personal Information Management (PIM) System 125 which includes an Internet-based Group Scheduling Module 127 of the present invention. The Internet-based Group Scheduling Module 127 provides group scheduling among users connected to the Internet or to other commercial service providers (e.g., CompuServe). In an exemplary embodiment, PIM System 125 comprises Sidekick.RTM., which is available from Starfish Software, Inc. of Scotts Valley, Calif. A general description of the operation of Sidekick.RTM. can be found in its accompanying user manual. Interface and methods provided by the group scheduling module of the present invention, in the exemplary embodiment of Sidekick.RTM., will now be described in further detail.

## DEPR:

As shown in FIG. 4, the system provides a "Deskpad" interface 400--that is, a personal information management interface which includes an electronic appointment calendar. The interface 400 includes a menu bar 410, for invoking menu items or commands. The interface itself is comprised of particular subregions. A first subregion 420 displays the current time and date. Below this region are a To Do region 430 and a Call region 440. The former lists To Do items which the user has included. The latter is a log of calls which the user wishes to track. Actual schedule events or appointments are displayed in the interface

at region 450. By default, appointments are displayed in one's own local time. The interface also includes a quick lookup or viewport 460, for working with another view of the interface (e.g., "Cardfile" view). Finally, the interface includes Desktop icons 470, for quickly switching to other modules of the system.

## DEPR:

The interface 400 provides different "views": Calendar view, Cardfile view, Write view, Expense view, and Activities view. The Cardfile view can be used as an address book in which the user stores names, addresses, e-mail addresses, phone numbers, and other information (e.g., record collection). The Cardfile works with the Calendar's Internet group scheduling to address event invitations, and also can look up phone numbers of incoming calls using Caller ID. The user can use the Cardfile with the Phone Dialer to dial calls, or merge card information into a letter using Quick Letter. The Write view provides a place to create and format documents, organized in folders and binders. The Expense view lets the user enter information from expense receipts, and organize expenses in folders. The user's expenses are printed in a finished expense report. The Activities view presents information about all the user's group scheduling events plus other Calendar activities: one's calls, To Do items, and individual appointments for the period selected. The Activities view is employed to reply to group event invitations and view replies to group events the user has originated.

## DEPR:

The next pane is a "Participants" page, illustrated in FIG. 5E, which allows the user to select participants. At 531, the user chooses an Address Book or a mailing list; clicking "More" opens a different Address book. Now, the user clicks the folder next to each name, and clicks the notification method (i.e., e-mail, fax, or the like) for that participant. The user adds desired selections to the Participants list 533 or CC list 534, using selection buttons 535. Thereafter, the user moves to the next pane by selecting Next button 536. On the "Message" page, shown in FIG. 5F, the user types the agenda or notes, at 541. From buttons 542, the user can click a "Message" button to select a file containing a message. Alternatively, the user clicks "Attach URL" (Uniform Resource Locator, the address of a site on the World Wide Web) to add an Internet address as part of the message information. Users receiving the URL can click on it to launch their Web browser and jump to the URL site. At 543, the user can select a file to send as an attachment to the meeting invitation. The user proceeds to the next pane by selecting Next button 544. The next pane or page is the "Resources" page, illustrated in FIG. 5G, where the user selects one or more resources from a list 551 of available resources. The user clicks the selection buttons 553 to add or remove items from the Event Resources list 552. By clicking Next button 554, the user proceeds to the next page.

## DETL:

```

1:
/***** 2: This
function is called for schedule a: 3: - Schedule meeting 4: - Broadcast meeting
5: - Reminder 6: - Reschedule 7: 8: Meeting message format is: 9: 10: message
type name.backslash.r.backslash.n 11: yy/mm/dd hh:mm.backslash.r.backslash.n (if
it's a reschedule message) 12: yy/mm/dd hh:mm.backslash.r.backslash.n 13:
yy/mm/dd hh:mm.backslash.r.backslash.n 14: location name.backslash.r.backslash.n
15: time zone value.backslash.r.backslash.n 16: "attribute" "attribute" . . .
.backslash.r.backslash.n 17: EventID1 value string.backslash.r.backslash.n 18:
EventID2 value string.backslash.r.backslash.n 19: Text
body.backslash.r.backslash.n 20: Regarding body.backslash.r.back slash.n 21: 22:
23: *****/ 24: int
ComposeScheduleMessage (LPGROUP.sub.-- APPOINTMENT lpGroup, 25: int nMessageType,
26: LPSTR lpMessage, 27: int nSize) 28: { 29: char szField[BUF.sub.-- LEN+1],
szSpace[2], 30: szReturn[5], szTime[BUF.sub.-- LEN+1]; 31: int nIsReschedule =
FALSE, nIsBroadcast = FALSE; 32: LPSTR lpBuf; 33: BYTE bTypes; 34: 35: szSpace[0]
= ` `; 36: szSpace[1] = 0; 37: GetReturnNewline (szReturn); 38: 39: if
((nMessageType == MSG.sub.-- DISTRIBUTE.sub.-- RESOURCE) 40: .vertline.
.vertline. (nMessageType == MSG.sub.-- TRANSFER.sub.-- RESOURCE)) 41: { 42:
LoadGenericHeaderMessage (lpMessage); 43: } 44: else 45: { 46: if (nMessageType
== MSG.sub.-- SCHEDULE .vertline. .vertline. 47: nMessageType == MSG.sub.--
REMINDER .vertline. .vertline. 48: nMessageType == MSG.sub.-- BROADCAST
.vertline. .vertline. 49: nMessageType == MSG.sub.-- RESCHEDULE) 50: Load.sub.--
ISK.sub.-- Message.sub.-- Header (lpGroup, lpMessage, nSize); 51: } 52: 53: 54:

```



```

/* 55: 56: This message was generated by Internet Sidekick. 57: * If you have
Internet Sidekick installed on your system: 58: Please ignore this message and do
not delete it from you inbox. 59: Internet Sidekick will automatically process it
next time you 60: Send/Receive messages or during the next scheduled Flash
Session. 61: 62: * If you do not have Internet Sidekick: 63: You can reply to
this invitation using your e-mail software. 64: Type an X next to either Accept
or Decline below, so it reads 65: [X] Accept or [X] Decline. 66: You can also
enter a short message as part of your reply to the 67: initiator in the blank
section between and 68: . 69: When you reply from your E-mail product, make sure
that the reply 70: includes the whole original message body including the section
71: below the heading, For Internet Sidekick Use Only. Also do not 72: modify or
delete the Subject of this e-mail message. 73: For further information on how to
procure it, please visit 74: Starfish Software's web site at: 75: . 76:
***** 77: 78:
Message From: {Initiator} 79: Date/Time: {Date/Time} 80: Duration: {Duration} 81:
Time Zone: {Time Zone} 82: Location: {Location} 83: City/Country: {City} 84: 85:
Subject: {Subject} 86: Message: {Message} 87: 88:
***** 89: 90: 91:
Your Reply: 92: 93: [ ] Accept 94: [ ] Decline 95: 96: 97: Reply Message: 98: 99:
100: 101: ***** 102:
The section below is for Internet Sidekick Use Only. 103: Please, do not edit or
delete any of the information 104: below this line. 105:
***** 106: 107: */
108: 109: 110: // append and space 111: LoadString (hCardfileInstance, 112:
IDS.sub.-- SKWGROUP.sub.-- MESSAGE.sub.-- TYPE.sub.-- ID, 113:
lpMessage+lstrlen(lpMessage), nSize); 114: lstrcat (lpMessage, szSpace); 115:
116: // append Schedule, Broadcast, Reminder, Reschedule 117: switch
(nMessageType) 118: { 119: case MSG.sub.-- SCHEDULE: 120: LoadString
(hCardfileInstance, 121: IDS.sub.-- SKWGROUP.sub.-- SCHEDULE, szField, BUF.sub.--
LEN); 122: break; 123: case MSG.sub.-- BROADCAST: 124: LoadString
(hCardfileInstance, 125: IDS.sub.-- SKWGROUP.sub.-- BROADCAST, 126: szField,
BUF.sub.-- LEN); 127: nIsBroadCast = TRUE; 128: break; 129: case MSG.sub.--
REMINDER: 130: LoadString (hCardfileInstance, 131: IDS.sub.-- SKWGROUP.sub.--
REMINDER, szField, BUF.sub.-- LEN); 132: break; 133: case MSG.sub.-- RESCHEDULE:
134: LoadString (hCardfileInstance, 135: IDS.sub.-- SKWGROUP.sub.-- RESCHEDULE,
szField, BUF.sub.-- LEN); 136: nIsReschedule = TRUE; 137: break; 138: case
MSG.sub.-- RESOURCE: 139: LoadString (hCardfileInstance, 140: IDS.sub.--
SKWGROUP.sub.-- RESOURCE.sub.-- SCHEDULE, 141: szField, BUF.sub.-- LEN); 142:
break; 143: case MSG.sub.-- DISTRIBUTE.sub.-- RESOURCE: 144: LoadString
(hCardfileInstance, 145: IDS.sub.-- SKWGROUP.sub.-- NEW.sub.-- RESOURCE, 146:
szField, BUF.sub.-- LEN); 147: break; 148: case MSG.sub.-- RESOURCE.sub.--
RESCHEDULE: 149: LoadString (hCardfileInstance, 150: IDS.sub.-- SKWGROUP.sub.--
RESOURCE.sub.-- RESCHEDULE, 151: szField, BUF.sub.-- LEN); 152: break; 153: case
MSG.sub.-- RESOURCE.sub.-- CANCEL: 154: LoadString (hCardfileInstance, 155:
IDS.sub.-- SKWGROUP.sub.-- RESOURCE.sub.-- CANCEL, 156: szField, BUF.sub.-- LEN);
157: break; 158: } 159: AppendString (lpMessage, szField, 160: szReturn, NULL,
NULL, NULL, nSize); 161: 162: if (nIsReschedule) 163: { 164: /* 165: if it is a
reschedule operation 166: then insert original date/time 167: */ 168:
GetGmtTimeString (lpGroup -->dwOldFromDate, 169: lpGroup-->bTimeZone, szTime,
BUF.sub.-- LEN); 170: LoadString (hCardfileInstance, 171: IDS.sub.--
SKWGROUP.sub.-- OLD.sub.-- DATE.sub.-- TIME, 172: szField, BUF.sub.-- LEN); 173:
AppendString (lpMessage, szField, 174: szSpace, szTime, 175: szReturn, NULL,
nSize); 176: } 177: 178: // Append from and to date/time 179: LoadString
(hCardfileInstance, 180: IDS.sub.-- SKWGROUP.sub.-- FROM.sub.-- DATE.sub.-- TIME,
181: szField, BUF.sub.-- LEN); 182: GetGmtTimeString (lpGroup-->dwFromDate,
183: lpGroup-->bTimeZone, szTime, BUF.sub.-- LEN); 184: AppendString (lpMessage,
szField, 185: szSpace, szTime, szReturn, NULL, nSize); 186: 187: LoadString
(hCardfileInstance, 188: IDS.sub.-- SKWGROUP.sub.-- TO.sub.-- DATE.sub.-- TIME,
szField, BUF.sub.-- LEN); 189: GetGmtTimeString (lpGroup-->dWToDateTime, 190:
lpGroup-->bTimeZone, szTime, BUF.sub.-- LEN); 191: AppendString (lpMessage,
szField, 192: szSpace, szTime, szReturn, NULL, nSize); 193: 194: // Append city
and country information 195: LoadString (hCardfileInstance, 196: IDS.sub.--
SKWGROUP.sub.-- CITY, szField, BUF.sub.-- LEN); 197: AppendString (lpMessage,
szField, 198: szSpace, lpGroup-->szCity, 199: szReturn, NULL, nSize); 200: 201:
// Append location and time zone information

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**WEST**

Generate Collection

L21: Entry 13 of 28

File: USPT

Jan 11, 2000

DOCUMENT-IDENTIFIER: US 6014135 A

TITLE: Collaboration centric document processing environment using an information centric visual user interface and information presentation method

## BSPR:

Another short fall of existing GUIs for groupware applications and network OS's is that the prior art systems are generally ignorant of time other than timestamping of files, logging system events, initiating backup subsystems, and timing out upon detecting a sustained error condition. These time related functions are essentially concerned with the system itself. In other words, events relevant to the information, as opposed to the system, are not logged for example. The needs of a work group jointly revising a document are not met. Observation of users using existing GUIs indicates that time is an essential aspect of almost all information. A document's creation or last modification date can be important information, but in a collaborative network workgroup setting, it is likely that timestamps alone, as a means of relating the document to time, will be insufficient. For example, in order to recover a version of the document as it existed before a fourth reviewer revised it but after a third modified the document requires more than mere timestamps.

## BSPR:

But there is another, bigger problem with transliterated mechanical models. The old mechanical method will always have the strengths and weaknesses of its medium, like pen and paper. Software has a completely different set of strengths and weaknesses, yet when those old models are brought across without change, they combine the weaknesses of the old with the weaknesses of the new. In the address book example above, the computer could easily search for an entry by first name, but, by storing the names in the same paradigm as the mechanical artifact, new ways of searching are precluded. The user is limited to essentially that which could be done in the world of paper and ink, but now the user must do it through dialog boxes and menus. Reliance on mechanical-age paradigms, have blinded the designers of prior art GUIs to the far greater potential of the computer to do information management tasks in an improved manner.

## DEPR:

Referring to FIG. 3, there is shown a display 50, which is the output of the monitor 14, and which interfaces with a user. The display 50 is generated by the computer program code 30 embodied in the article of manufacture of the present invention. The display 50 has a plurality of first icons 40 (A-C). Each of the first plurality of icons is a graphical representation of an individual. Each of the first icons 40 has a set of objects, which can be inherited, if the creator of the first icon 40 so desired. Thus, for example, a first icon 40 can be from the Internet published by a user, in which the user has published his desk top view, which can be inherited, by the user of the system 10. When the user of the system 10 selects the objects associated with the selected first icon 40, which the creator of that first icon 40 has permitted to be published, the user of the system 10 will also see the desk top that the publisher created. As a result, a creator of a first icon with inheritable objects can easily maintain and update objects which are far from the publication location. Moreover, the objects created by the publisher can be inherited in part or in total. Thus, if a publisher has created a first set of objects relating to desk top, and a second set of objects relating to favorite web sites, a user of the system 10 can choose to inherit one or both types of objects.

## DEPR:

When a desired second icon 42 (representing information, such as file or reference to a location of a web site) is selected through the activation of the

reference to a location of a web site) is selected through the activation of the pointing device 20, and is "dragged" until the selected second icon 42 is positioned over the third icon 44, the third icon 44 is transformed into a timeline displaying information relative to the time of creation, reception or modification of information associated with the selected second icon 42. When the user moves the pointing device 20 to place the cursor on any of the versions of the documents so displayed on the timeline 44, and selects one of those versions, then the selected version would then be displayed on the display 50.

**WEST**

Generate Collection

L21: Entry 14 of 28

File: USPT

Dec 14, 1999

DOCUMENT-IDENTIFIER: US 6002767 A

TITLE: System, method and article of manufacture for a modular gateway server architecture

DEPR:

Since all SET messages between a merchant and an acquirer are currently merchant-initiated (as specified in the SET documentation), there must be a separate mechanism for initiating a message from a gateway, for example to request the upload of management information base (MIB) data, or to download new parameters. This is accomplished by requiring the gateway to send a message to the merchant via a MIME-encapsulated PKCS-7 conformant message containing name-value pairs to the merchant server directly, rather than to the SET module. This channel is shown in FIG. 18A at block 1860.

DEPR:

FIG. 1C is a block diagram of a payment processing system in accordance with a preferred embodiment. The Certificate Issuance at the Bank Web Site 162 resides at the bank web site 182. It is utilized for issuing SET complaint/X.500 certificates to consumers. The implementation of this system may vary from one bank to another. However, the system gathers consumer's personal information, and after processing the information, the system issues a certificate along with a payment instrument to the consumer.

DEPR:

The Single Account Wallet 160 at the bank web site 182 represents the MIME message that is created by the Certificate Issuance system. This MIME message contains a VeriFone wallet. The VeriFone wallet contains a single payment instrument and the certificate associated with it. For security reasons, the private key is not included in the wallet. The has to specify a private key before using the instrument for payment. When the consumer is issued the certificate, this MIME message is sent to the browser. The browser launches the Certificate Installation application 174, 144 which is defmed as a helper application in the browser. The Certificate Installation application 174, 144 reads the MIME message and install the wallet into the wallet database 158.

DEPR:

The PayWindow Setup Helper application 172 is used by the consumer to install helper applications and other modules from the web site onto the consumer desktop. When a consumer attempts to install an application for a first time, the consumer does not have a helper application on the desktop. Thus, the first time installation of an application requires a consumer to perform two steps. First the user must download the system package to their desktop and then the user must run setup to decompress and install the system. Thereafter, whenever the consumer gets a new release of system software, the browser launches this helper application which in turn installs the appropriate other system modules.

DEPR:

The Certificate Issuance CGI scripts 162 and the Single Account Wallet 160 at the Bank Web Site 182 is processed as described in the native system. The Certificate Installation Applet of the Bank Web Site 182 is utilized by the Certificate Issuance CGI scripts 162 system to deliver a consumer's certificate to the consumer's desktop.

DEPR:

FIG. 62 is the main administration display for the Gateway in accordance with a preferred embodiment. A set of menu selections are presented at 6200 which will

be described in more detail for each display. FIG. 63 is a configuration panel in accordance with a preferred embodiment. The configuration panel provides access to management information for configuring a gateway management information database. The Merchant Identifier (Mid) 6310 is a thirty character, alphanumeric field that uniquely defines a merchant. The Merchant Name 6320 is a fifty character, alphanumeric field, the Edit 6330 and Delete field 6340 are hyperlinks to detailed panels for modifying information in the management information database. FIG. 64 is a host communication display for facilitating communication between the gateway and the acquirer payment host. The IP Address Field 6410 contains the Internet Protocol address for communicating via TCP/IP to the Internet. The TCP logical port field 6430 uniquely identifies the port for accessing the Internet, and the SAVE field 6430 invokes storing of the host communication information in the database. FIG. 65 is a Services display in accordance with a preferred embodiment. This display initiates portions of the Gateway such as the host multiplexer 2130 of FIG. 21. FIG. 66 is a graphical representation of the gateway transaction database in accordance with a preferred embodiment. Each of the fields represents a portion of the internet database schema in accordance with a preferred embodiment.

ORPL:

Edge: Work-Group Computing Report, Digital ID: Verisign Inc. To Provide Digital IDS For Open Market's Secure Webserver; Key Technology For Verifying the Identifies of Parties In Electronic Commerce, Aug. 21, 1995, pp. 236-237.

ORPL:

Edge: Work-Group Computing Report, E-Commerce: IBM Leads Industry With Comprehensive Strategy, Technologies for Electronic Commerce; Electronic Shopping, Secure Transactions, May 6, 1996, pp. 48-52.

ORPL:

PR Newswire, 1996 Olympic Games Web Site Proves a Successful as Venue for Olympic Ticket Sales; IBM-Developed Server Enables Secure Electronic Transactions for a Large Number of Consumers, May 1, 1996, pp. 83-84.

ORPL:

Business Wire, MasterCard International Goes Live On the Internet; New MasterCard World Wide Web Site Home Page Combines Utility and Imagination, Mar. 27, 1995, pp. 294-296.

**WEST**

Generate Collection

L21: Entry 26 of 28

File: USPT

Aug 25, 1998

DOCUMENT-IDENTIFIER: US 5799318 A

TITLE: Method and apparatus for collecting and displaying information from diverse computer resources

BSPR:

This invention generally relates to the organization of information for user review, and more particularly, to the management of information in a networked computer environment.

BSPR:

Various applications are currently employed to undertake the management and distribution of information. Typically, these applications segment information into specific categories as defined by the type of information or the application. Existing applications fall into the broad categories of transaction based applications and file based applications.

BSPR:

Transaction based applications operate to save each new message as a transaction. Other users may comment on a new message by forming an additional message. The additional message, even if affixed to the original message, becomes a new transaction whereby it is added to a list of individual messages. Transactions can be added and deleted, but, they are not dynamic. That is, transactions cannot be changed over time as the information changes. Thus, a message which contains information that is subsequently changed requires that a new message be sent to indicate changed information. Hence, transaction based applications present work group environments with significant limitations.

DEPR:

The present invention provides for the simultaneous management of diverse types of information on a workstation. Such management is provided regardless of the type of application generating or storing the information.

ORPL:

Jessica Davis, "First Floor Tools monitor Web site changes," InfoWorld, Feb. 19, 1996, p. 51.

**WEST****End of Result Set**

Generate Collection

L2: Entry 3 of 3

File: USPT

Jan 19, 1999

DOCUMENT-IDENTIFIER: US 5862325 A

TITLE: Computer-based communication system and method using metadata defining a control structure

## BSPR:

A different type of Web monitoring solution is provided by Revnet Systems Inc. With its GroupMaster software, Web providers can create and insert special hyperlinks representing interest topics on the pages of their Web site. When a consumer clicks on this link a special data file is transferred to the consumer's GroupMaster client software. The client software then polls the Web server for updates to the interest topic input by the provider. Unlike Smart Bookmarks, all interest topics at the site can be checked in one update polling action. Update messages can be delivered to the consumer via the client software. However, these messages only contain links back to pages with follow-up information at the Web site. They do not store or index information from the provider, nor do they provide a mechanism for the consumer and provider to automate other types of structured data exchanges or manage a communications relationship.

## BSPR:

Consequently, a need exists for a communications control system which allows providers and consumers to quickly and easily establish an automated communications relationship; which automatically updates both parties with changes in communications control data from the other; which works with all communications networks shared by the provider and consumer; which allows both parties to automatically control, filter, store, index, and process communications from the other; which allows both providers and consumers to share many common communications services; and which allows both parties to easily manage, copy, transfer, and terminate the communications relationship.

## DEPR:

Once the NewObjectReceipt method has been executed, the consumers notification preferences for new objects are retrieved (step 704) from the NewObjectNotify attribute of the GlobalPrefs class (103, FIG. 3) in the consumer database 21. A test is done to see if notification is desired (step 705). If so the consumer program 22 retrieves and executes the consumer's GlobalPrefs NewObjectNotify method (step 706). The user may wish to have the object displayed immediately, to receive an e-mail about the new object, to include a message about the new object in the user's notification report (including its size, methods, update intervals, etc.), or any other notification action or combination of actions. Notification preferences and methods are further described below. Also, different actions may be taken based upon the program state and operation involved with the object's arrival. For example, the user may wish to have an object displayed immediately if the user manually selected it as a HTTP request from a Web site, but not if it was an object update retrieved automatically via a Web HTTP polling request by the consumer program 22, or if it arrived via e-mail. Different actions may also be taken based upon attributes or methods of the communications object itself, or a comparison between these and with the existing objects in the consumer database 21. For instance, the consumer may wish to immediately display new objects from selected providers whose system ID is already present, but only have notification in the notification report of new objects from any other provider system ID.

## DEPR:

One communications object can be used to control the updating of other communications objects. For example, the receipt method for a composite communications object can trigger the updating of each of its component objects.

To illustrate this, refer to FIG. 20 and the preceeding discussion of consumer distribution control using the pull technique. A composite communications object 900 can contain multiple page subscription element instances (853, FIG. 18) corresponding to its component communications objects 901. Each page subscription element instance can include an attribute for the current version value of the corresponding component object 901. This version value attribute can be maintained using a rule 140 that updates the version value of the page subscription element instance when the version value of the component communications object 901 changes. When the composite communications object 900 is updated, its receipt method can compare the version value in this attribute with the version value of the corresponding component object 901 currently stored in the consumer database 21. When the version value has changed, the update method of the corresponding component object 901 can be executed to update the component object. In this manner the component objects themselves do not need to be polled for updates. This same technique of "indirect updating" can be applied to any set of communications objects, where elements in one communications object are processed to trigger the updating of other related communications objects. In this way, for example, a single communications object at a web site could be used to check for updates on many additional communications objects on the web site or related web sites.

## DEPR:

A second application is personalization of web or hypermedia content, i.e., presenting a customized or filtered view of a web site to reduce the need for scanning or browsing by the consumer. One existing approach is to have consumers establish an ID, choose a password, and enter personal preference data into input forms provided by the web server. This data is then stored at the web server or another remote location and used to present customized views of the web site. An example is MyYahoo from Yahoo Inc. To see new content, the consumer must then manually visit the web site, enter the necessary ID and password, and browse their customized content, which is only available online. Whenever the consumer's preference data changes, the consumer must manually change it on all such web sites.

## DEPR:

This approach requires that all address resolution logic be present in one of two places: in the DNS protocol, or in the address resolution methods available at remote hosts. With a communications object system, the address resolution logic first resides in the link method 141, which can in turn call any other communications object method 141 or partner server method 141 as described in the section on communications object methods above. This means that by using a UID, URL, name, or other attribute or combination of attributes supplied in a link element 143, the link method 141 can first search the local databases 11, 21 within the programs 12, 22 for the specified communications object or objects. If the communications object is not found locally, the link method 141 can then query one or more distribution servers 32 where the communications object is likely to be stored, such as LAN or WAN distribution servers. These distribution servers 32 may be represented by distribution service objects 1310, which will be further discussed below. If the target communications object 110 is not found on a distribution server 32, then the link method 141 can process the attributes of the link elements 143 to determine the next most efficient means of retrieving the communications object. For example, if a URL is available, the link method 141 could process this. If a URL is not present but a UID is available, the link method 141 could automatically use a UID resolution service. If a UID is not present but a name is available, the link method 141 can use a name resolution service. UID or name resolution services can operate similarly to the Domain Naming Service (DNS) for the Internet, or to the PURL naming service cited above. Additionally, the name resolution service could incorporate features under consideration by the World Wide Web Consortium (W3C) for Uniform Resource Identifiers (URIs) and Uniform Resource Name (URNs). These systems are discussed generally by the W3C staff at the W3C World Wide Web site at <http://www.w3.org/pub/WWW/Addressing/>.

## DEPR:

As a subclass of standard communications objects 110, service objects can include all the control functions of communications objects described above. Certain control functions have special relevance for service objects. First, link control allows other communications objects to call the methods of a service object object regardless of where the service object may be located on a communications



network 3. The special applications of link control will be discussed below. Second, update control allows a service object to stay current regardless of where it is located on a communications network 3. Version monitoring and update querying are particularly efficient techniques of update control for service objects and will be discussed below. Third, notification control allows a service object provider to notify providers or consumers using the service object about relevant changes to the service object or the communications services it makes available. Fourth, data exchange control allows the service object to automate data exchanges with the server or servers the service object may represent. Fifth, data archive control allows service objects to delete themselves if they age beyond a certain date or have not been used within a certain period. This allows databases 100 to avoid an accumulation of seldom-used service objects. Finally, event tracking control and reporting control allows service objects to create and report transaction records which can be processed to provide further services to the provider or consumer. These transaction records can also be used by the service object provider for billing or statistical purposes.